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Improved OGFIR GUTTERS







N the early period of American building, gutters of wood or "dug-outs" were widely used on the Colonial homes. The

passing of years brought forth gutters of various metals intended to replace wood, but today wood gutters are more popular than ever before and are unsurpassed for beauty, permanence and economy. In this book we want to present for your approval the modern descendant of the old-fashioned "dug-out," the Improved O. G. Fir Gutter.





Improved O.G. FIIR GUTTERS



Look Better Last Longer Less Expensive

E. M. LONG & SONS

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Improved O. G. Fir Gutters for Beauty and Permanence

ROM the standpoint of beauty, permanence and economy, Improved O. G. Fir Gutters are unsurpassed by any type of

gutter on the market. They are called "Improved" because they are improved in design, pattern and quality over other gutters. That is why they are rapidly supplanting metal gutters on all types of buildings using exposed or hanging gutters. That Improved O.G. Fir Gutters possess the above highly desirable qualities is easily shown.

Look Better

We think that you will agree that the straight horizontal lines and O. G. shape of the gutters in the illustration on the opposite page add much to the attractiveness of the house. Beauty of form and design give these gutters real architectural merit. When desired, the Improved O. G. Fir Gutter can be included as a part of the cornice profile.

Compare any other type of hanging gutter for beauty, feature by feature, with Improved O. G. Fir Gutters. Certainly the O. G. Gutter is more beautiful than the rounded trough designs for even when the latter is properly installed, little is added to the exterior trim of the building. Turn to Page 9 and see the neat, clean-cut appearance that these Gutters give to various types of homes.

Last Longer

The second big feature of Improved O. G. Fir Gutters is their permanence. These gutters last longer than gutters of other types. They are made of clear, soft, old growth yellow fir. This means that these gutters, unlike metal gutters, cannot corrode or disintegrate when exposed to smoke, fumes, acids or natural They will not contract nor elements. expand under varying weather conditions. Nor will they be blown loose from the building by high winds. An Improved O. G. Fir Gutter, once installed, can be depended upon to remain in excellent service for many years to come.

Less Expensive

The third great feature of Improved O. G. Fir Gutters is their economy. Not only are they economical in first cost but with the use of this gutter no roof mould is necessary. Another economy is found in the painting of the gutter. This can be accomplished with the same paint and at the same time the house is painted. The biggest economy of the Improved O. G. Fir Gutter is in its durability or lasting property. This gutter in many cases has lasted better than 25 years while the average metal gutter, owing to disintegration and corrosion, must be replaced every few years at a duplication of the original cost. Why not, therefore, install Improved O. G. Fir Gutters once and save these replacement costs?

Wood Versus Metal



HE Improved O. G. Fir Gutter is replacing gutters of metal. This is particularly true where the gutter is to be used on subjected to fumes smake or acid.

buildings subjected to fumes, smoke or acid vapors such as railroad buildings.

The reason for this return to wood lies in the fact that metal gutters, regardless of the metal, cannot stand up under the above corrosive and deteriorating factors. Not only do chemical changes take place in exposed metals, but the latter are subject to contraction and expansion in temperature extremes. Wood on the other hand is not affected by corroding elements nor is it subject to expansion or contraction due to temperature extremes.

The ordinary galvanized metal is most susceptible to corrosion and deterioration. Water has a rapid deteriorating action on zinc in the presence of air. Galvanizing is frequently poor, breaks down and exposes the basic metal which is usually of too thin a gauge to resist the elements for any length of time and hence quickly gives way to rust. Gutters of this type last but a few years and must be replaced often. Galvanized gutters are subject to expansion and contraction, in many cases leading to the breaking of joints.

Copper gutters are expensive. Copper oxidizes quickly in hot climates, while in moderate climates it takes on a coating

of carbonate of copper and turns green. Copper, however, is less subject to corrosion and is subject to some expansion and contraction since its coefficient of expansion is .000017.

The use of lead for gutters is very expensive. Lead has the high coefficient of expansion of .000029 which makes it likely to creep or pull open at joints when exposed to extreme temperatures. Soft water, containing decaying vegetable matter, such as leaves, forms nitrates which decompose lead very quickly.

Dampness, combined with soot and smoke, has a rapid deteriorating action on metal gutters. Experiments have proven that in some cities where there is a great deal of smoke, gutters of metal must be replaced two or three times as often as in other places.

The chemistry of the action of smoke, soot, acid fumes and gases on the various kinds of metal gutters would occupy a volume; sufficient to say here that extensive investigations on the part of railways have proven that the wood gutter is not affected by these disintegrating agencies.

Inasmuch as Improved O. G. Fir Gutters, made of old growth, yellow fir, are not affected by any of the above deteriorating factors and are free from expansion and contraction, it is easily understood why they outlast and are rapidly replacing gutters of metal.



The Case for Wood Gutters



THE gutter shown at the left is an old-fashioned wood "dug-out" that has been in place on this building for over 70 years without the least attention. It has withstood 70 winters of ice and snow. Being nailed up with hand-made nails, it has successfully baffled wind and storm for a normal life-time and is still giving service.

Soft yellow fir, such as is used in Improved O. G. Fir Gutters, has been known to resist75 years of exposure without painting. This is the case for wood gutters. Now compare this with gutters of metal.

ALL of us have seen metal gutters like the one at the right. This particular gutter has been up only a few years. A thin gauge metal, poorly galvanized, it has rusted through. The snow and ice have torn it loose so that it flaps disconsolately in the winter winds, a mute evidence of the inability of most metal gutters to withstand the elements. Where such gutters are exposed to smoke, fumes or acids, the deterioration is even faster and more pronounced.

Compare these two photographs carefully and then draw your own conclusions as to the respective merits of wood and metal gutters.



A Finishing Touch for Beautiful Homes



MPROVED O. G. Fir Gutters add the finishing touch to a beautiful home. Beautiful when installed, they will be just

as attractive in many years to come. Their construction and their harmony of design blend into almost any architectural style. They offer the architect or the builder a means of putting originality and finish into his work. They fit into any type of architecture as though they were designed especially for that particular type.

The graceful curves and the straight horizontal lines of this Improved O. G. Fir Gutter add to the appearance of the finish of the home. The Gutter can also be included as a part of the cornice profile.

The photographs of the three houses on the opposite page confirm, we believe, what we have said about the clean-cut, neat appearance and the beauty of the finishing touch given to a home by the use of Improved O. G. Fir Gutters. Notice how they blend with other architectural details to form a pleasing finish to these homes. Notice, too, how they are equally beautiful and appropriate for either brick or frame construction.

Beauty That Lasts

The beauty of a wood gutter lasts. Perhaps you have seen gutters that have

been ruined, before the house is occupied, by having a heavy ladder thrown against the soft, yielding metal. Improved O. G. Fir Gutters cannot be destroyed or damaged by ladders, for they are so strong and rigid that carpenters can scaffold from these gutters or walk upon them. Snow slides and heavy winds do not tear them off. There are no soldered joints to pull apart due to water freezing in the gutter, or expansion or contraction under temperature extremes. It is this permanence that gives them a lasting beauty assured by no other gutter.

For Any Type of Building

The possibilities for the use of Improved O. G. Fir Gutters are not limited to certain types of homes or buildings. Because of their neat appearance and graceful shape, they are equally appropriate for either a cottage or a mansion. Because of their economy and the same beauty, they can be used on a public building or a barn. In fact, these gutters are already widely used on public buildings and by rural contractors. Their range of usefulness is limited only to buildings where hanging gutters are not to be used. Type of construction is no bar to the use of Improved O. G. Fir Gutters. They can be adapted to frame, brick or stucco with equally pleasing results.



Improved O. G. Gutters make a neat appearance on this house





These gutters conform to any type or style of cornice construction

Where Improved O. G. Gutters add neatness and assure permanence



The Choice of Many Railroads



NE of the most significant features of Improved O. G. Fir Gutters is their growing popularity among railroads. Seven-

teen different railroad lines are now using these gutters. This fact in itself speaks volumes for their merits.

Metal gutters on railroad buildings were short lived. The smoke and gases had a disastrous effect upon the metal, causing it to corrode and disintegrate in a very short space of time. The continual replacement of these gutters was extremely expensive. In searching for a solution to the gutter problem these railroads tested Improved O. G. Fir Gutters and found that they would last for years on railroad buildings, being absolutely unaffected by the disintegrating factors peculiar to railroad property. They were also pleased with the Improved O. G. Fir Gutter's neat appearance and architectural beauty.

As we see it, there is a lesson in this preference of railways for these particular gutters. The railway engineer approves only such materials as can meet with most exacting quality tests and architectural fitness. Under railway use, Improved O. G. Fir Gutters are subjected to average building conditions plus deteriorating and corroding factors that eliminate the best of metal gutters. If Improved O. G. Fir Gutters stand up under these tests we believe that they will meet the approval of the most exact-

ing architect, builder or home owner and will render the utmost in satisfaction. And if the railroads find them the most economical we are sure that the average building owner will be doubly pleased with their economy and long life.

On the opposite page are shown several railway passenger and freight stations equipped with Improved O. G. Fir Gutters.

Here is a list of railroads using Improved O. G. Fir Gutters:

Atlantic Coast Line Railroad Company Pennsylvania Railroad Company

New York, Chicago & St. Louis Railroad Company

Chicago & Northwestern Railway Company

The Cleveland, Cincinnati, Chicago & St. Louis Ry. Company

The Delaware & Hudson Company
The Nashville, Chattanooga & St. Louis
Railway Company

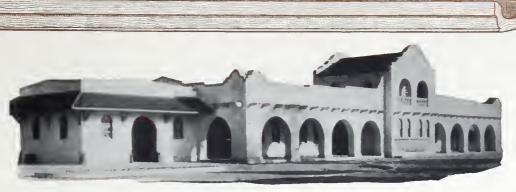
East Carolina Railway Company Toronto, Hamilton & Buffalo Railway Company

Pere Marquette Railway Company
The Wheeling & Lake Erie Railway
Company

Maryland & Pennsylvania Railroad Company

Atlanta & West Point Railroad Company The Chicago, Rock Island & Pacific Railway Company

The Western Railway of Alabama Central of Georgia Railway Company Florida East Coast Railway Company



The gutters on this beautiful piece of architecture certainly help to maintain that beauty



Improved O. G.
Gutters added
the finishing
touch and an
assured permanence to these
stations



Freight stations profit architecturally and economically by the use of these gutters

The permanence of the gutters on this station has been assured

DETAILS SHOWING APPLICATION OF IMPROVED O. G. FIR GUTTERS. 13/16" J-1432 £ 11/16 1 1176 13/8" 350 4 % 1 3/a" - 43/4"-15 SCALE DETAILS OF STANDARD SIZES OF OG TIR GUTTERS Joist Lead goose neck to leader with flange imbedded in elastic cement secured with copper tacks. SECTION Plate 15 SCALE DETAILS SHOWING LEADER AND GUTTER CONNECTION Rafter Elastic cement. - Edge of lead splice plate. - Sheet lead. -Copper tacks Brass screws. a.G. Fir 3 brass screws, coarse Gutter threaded gutter to building. SECTION A-A ELEVATION Stud Showing spliced joint Drass screws. Splice Lead goose neck to 3" 6 34" brass screws, coarse thread, securlng spliced joints. Screws countersunk and holes puttied. Copper tacks leader. about 34° ac. Sheet lead 3 in. wide imbedded in elastic cement. Brass screws PLAN 14 SCALE DETAILS SHOWING SPLICED JOINTS OF GUTTER. 11/2 SCALE DETAIL OF O. G. FIR GUTTER WITH OPEN RAFTERS. Joist. Joist Rafter 3° brass screws coarse threade secure gutter t building Ratter Q.G. Fur Gutter O.G Fir 3° brass : Trons, coarse projected, secure projecter to Blocking Stud Stud Lead goose Lead goose neck to neck to leader leader 15 SCALE DETAIL OF Q G. FIR GUTTER WITH BOXED RAFTERS, 15 SCALE DETAIL OF Q G FIR GUTTER WITH BOXED CORNICE

How to Install O. G. Fir Gutters

E strongly recommend setting all gutters level for architectural and practical reasons. Architecturally—so that straight

horizontal lines can be retained. Practically—because water will always seek its own level and find its outlet at the leader spouts. Short length gutters require one leader. Long length gutters require one or more, according to the area of roof to be drained.

If desired, the gutter can be set with slight pitch at the sacrifice of architectural appearance; this can be done by setting the leader end of gutter slightly lower; or another method is to spring the gutter slightly lower at both ends than it is at the center, which can be readily done, due to the long lengths of our gutters, with a leader at each end.

For connecting down spouts, making spliced joints and miters, we would recommend the use of the following specifications:

All gutters whose finished length will require joints shall be spliced as follows:

The two pieces to be joined should be cut on a bevel to fit closely and the joint should be sealed together with white lead or roof cement and secured firmly with two 3-inch brass screws with coarse thread at bottom and two 34-inch brass screws at top. The screw heads shall be counter-sunk and puttied.

Note—Improved O. G. Fir Gutters are furnished in lengths as long as 40 feet in either size; the necessity of a joint may therefore be avoided on the ordinary size house.

All miter joints shall be constructed in the same manner as the spliced joints.

Leader down spouts—Where located on the drawings, provide opening for leader downspouts. Type of downspout is left to the discretion of the architect, contractor or builder.

Improved O. G. Fir Gutters do not require mineral paints. Use same paint as for rest of house. Painting of the gutters can be done at the same time that the house is painted and by the same painters. While it is not essential to have them creosoted, if desired, gutters can be furnished already treated, at a small additional cost.

The foregoing specifications apply to the installation of gutters as shown by drawings or details on opposite page. Experience has taught us that our gutters so applied make a neat, practical job. However, we fully realize that architects may have different ideas in drawing plans and specifications and mechanics and contractors may have their own good ideas for making various kinds of miters and joints based on their knowledge and experience, which manner when applied, may be equally practical. Complete details together with specifications are given in Sweet's Architectural Catalog.

Made of Old Growth Yellow Fir



HE Improved O. G. Fir Gutter is made of clear, soft, old growth yellow fir that is very strong and durable; selected

for texture and triple inspected.

Soft Yellow Fir has an enviable reputation for withstanding weather and resisting corroding or disintegrating elements such as smoke, acid fumes, soot, etc. It cannot expand or contract under tempera-

ture changes.

A house in the Willamette Valley in Oregon, built of Fir, has stood for 75 years without a coat of paint. This house shows no signs of rot and the window frames made of soft, yellow fir are as sound as a dollar. This is the same wood that is used in our Improved O. G. Fir Gutter.

The photograph below shows a Lumber Jack topping a Fir. From these tall,





straight, giants of the forest, our mills on the Pacific Coast cut out the rough, clear gutter stock. The straightness and great height enable us to cut out gutters from 10 to 40 feet in length, mostly long lengths. Stock sizes are 3x5-inch, 4x6-inch and 5x7-inch, in the rough (For finished sizes, see page 12).

The milling of Improved O. G. Fir Gutters gives a uniformity in size and pattern at all times. Improved O. G. Fir Gutters will not warp or spring out of shape, but, once installed, stay in perfect alignment. They are free from defects of any kind. Many years of use will show no change in the appearance of Improved O. G. Fir Gutters. From our warehouse stock, at Cadiz, Ohio, these gutters are loaded into cars, as shown in the photograph on this page, covered with rubber roofing for protection in transit and shipped over a wide scope of territory covering many states and parts of Canada. We carry a stock of approximately half a million feet to assure prompt deliveries at all times.



Approved by Architects, Builders and Retail Lumber Dealers' Associations

MPROVED O. G. Fir Gutters have the well-deserved praise of many architects, builders and railways. Furthermore, Retail Lumber Dealers' Associations have endorsed them. When you have used Improved O. G. Fir Gutters, we believe that you, too, will endorse them as O. K., making them your standard.

Considering the many advantages of Improved O. G. Fir Gutters, point by point, their superiorities are so numerous that you cannot well afford not to use them on your next building. Just remember that Improved O. G. Fir Gutters look better, that they last longer and that they are less expensive than any other gutter.

There is no uncertainty attached to the use of Improved O. G. Fir Gutters. You can bank on it when you put them up that they are going to stay up for many years. You know beforehand that they won't corrode or disintegrate, even if they are subjected to smoke, soot, fumes and acid vapors. When the wind blows its hardest, you are assured that your Improved O. G. Fir Gutters will not be on the ground or flapping in the wind but will remain snugly attached to the building. With Improved O. G. Fir Gutters on a house you can mark gutters off of your list of necessary replacements and

There is but ONE Improved O. G. Fir Gutter

FOR YOUR PROTECTION

EVERY PIECE

IS TRADE - MARKED

TRADE - MARKED

TRADE - MARKED

MARKED

REG. U. S. PAT. OFFICE

repairs on the building. And don't forget that the house itself will look trimmer and neater and better for the use of these gutters.

When a metal gutter has failed and must be replaced, do that replacing with an Improved O. G. Fir Gutter instead of another metal gutter. By so doing you will be insuring yourself against another replacement within a few years. Almost as many of these gutters are used for replacing metal gutters as are used for new installations on new buildings.

When planning your next house or building, be sure to settle the gutter problem once and for all by installing Improved O. G. Fir Gutters. For any additional information write to

E. M. LONG & SONS

CADIZ.

OHIO



The above photograph is a bird's-eye view of the warehouse of E. M. Long & Sons at Cadiz,
Ohio. Over a half-million feet of assorted sizes and lengths of Improved O.G.
Fir Gutters are carried in stock to assure prompt deliveries.



